

REVISION OF THE NEW ZEALAND RISSOIDÆ.

By HENRY SUTER.

Read 12th November, 1897.

Genus RISSOIA, Fréminville, 1814 (*em.*).

Subgen. RISSOIA, s.s.

Sect. TURBELLA, Leach, 1847.

1. RISSOIA HUTTONI, *nom. nov.*

Rissoia nana, Hutton: Cat. Marine Moll. New Zealand, 1873, p. 28;
 Proc. Linn. Soc. New South Wales, vol. ix (1885), p. 941.
 (Non *R. nana*, Phil. = *R. dolium*, Nyst.)

Barleeia nana, Hutton: Man. New Zealand Moll., 1880, p. 81.

Shell minute, imperforate, white or yellowish-white, oval, spire short and blunt; whorls 5, swollen, longitudinally roundly ribbed, about 25 ribs on the penultimate whorl, becoming obsolete on the periphery of the body-whorl, base smooth; aperture ovate, lip somewhat thickened, continuous. Operculum unknown. Long. 2·5, lat. 1·25 mm.

Hab.—Stewart Island.

Type in the Colonial Museum, Wellington.

2. RISSOIA HAMILTONI, *n.sp.* Fig. IV. (p. 5.)

Shell minute, ovate, rimate, colour dirty-white or cinereous; whorls 6, convex, protoconch rufous, longitudinally striate, the succeeding whorls with distant, rounded, longitudinal riblets, about 14 on the body-whorl, the interstices there being slightly broader, base smooth. There is sometimes a rufous band encircling the upper whorls above the suture, and extending on the body-whorl to within a short distance from the mouth. Suture impressed, marked with a marginal thread which continues on the body-whorl below the periphery to the aperture, intercepting the longitudinal riblets. In

young specimens the riblets are continued below the spiral thread to the umbilical region. Aperture vertical, rotundly ovate, continuous, outer and basal margins sharp, columella somewhat thickened, rufous, rather concave, subtruncate at the base. Operculum not seen. Long. 2·5, lat. 1·5 mm.

Hab.—Lyllall Bay, near Wellington. It was found by Mr. A. Hamilton of Dunedin, whose name I have much pleasure in uniting with the species.

Type in my collection.

Subgen. *SABANÆA*, Leach, 1847.

3. *RISSOIA INCIDATA* (Frauenfeld).

Sabanæa incidata, Frauenfeld: Novara-Exped., Zool. vol. ii, Mollusca, p. 12, pl. ii, fig. 29.

Rissoia (Sabanæa) incidata, Frauenfeld: Tryon, Man. Conch., ser. I, vol. ix, p. 339, pl. lxiii, fig. 65.

Shell conoidal, thick, smooth, brownish; whorls 5, flattened, suture and periphery channelled; lip thickened.

Hab.—Botany Bay (Frauenfeld).

I found several specimens of this interesting little shell on seaweeds at Te Onepoto, near Sumner. The length of my specimens is 1·25 mm.; Frauenfeld gives 1·4 mm.

4. *RISSOIA ANNULATA*, Hutton.

Rissoia annulata, Hutton: New Zealand Journ. Science, vol. ii (1884), p. 173; Proc. Linn. Soc. New South Wales, vol. ix (1885), p. 940; Macleay Memorial Volume (1893), p. 65, pl. viii, fig. 67.

Shell ovate, smooth, brown, often with a paler band just below the suture; whorls 5, slightly rounded, suture well-marked; aperture rounded, continuous in the adult. The operculum is corneous and paucispiral, without any internal process. Specimens from Lyttelton measure: long. 2·25, lat. 1·25 mm.

Hab.—Auckland; Lyttelton, under stones between tide-marks; Pliocene of Wanganui and Petane (Hutton).

Type in the Canterbury Museum, Christchurch.

The species may be distinguished from *R. subfusca* by its shape and more strongly marked suture.

Var. *minor*, n.var.

Smaller than the typical form, suture more impressed, polished. Long. 1·5, lat. ·75 mm.

Hab.—Foveaux Strait (A. Hamilton).

Type in my collection.

Subgen. CINGULA, Fleming, 1828.

Sect. CINGULA, s.s.

5. RISSOIA SUBFUSCA, Hutton.

Rissoa subfusca, Hutton: Cat. Mar. Moll. New Zealand, 1873, p. 28;
Man. New Zealand Moll., 1880, p. 81.

Rissoa purpurea, Hutton: Cat. Mar. Moll. New Zealand, 1873,
p. 29; Man. New Zealand Moll., 1880, p. 80; Proc.
Linn. Soc. New South Wales, vol. ix (1885), p. 940.

Rissoia (*Cingula*) *purpurea*, Hutton: Tryon, Man. Conch., ser. 1,
vol. ix, p. 344, pl. lxxi, fig. 89.

Rissoia (*Cingula*) *purpurea*, Hutton, var. *subfusca*, Hutton: Tryon,
Man. Conch., ser. 1, vol. ix, p. 344.

Shell small, subulately elongated, smooth, not polished; whorls 6, flat, suture obscure, upper whorls purple, or purplish-red, with a white band below the sutures; last whorl yellowish, also with a white band below the suture. Aperture rounded, peristome continuous, thickened, and slightly expanded. Operculum unknown. Long. 2.5, lat. 1.25 mm.

Hab.—Stewart Island.

Type in the Colonial Museum, Wellington.

Var. *miconema*, n.var.

More cylindrical, protoconch purple, smooth, the rest of the shell is seen under a lens to be marked with strong and close incremental striae, crossed by numerous lirae. Operculum unknown. Long. 3, lat. 1.25 mm.

Hab.—Stewart Island (A. Hamilton).

Type in my collection.

Sect. ONOBA, H. & A. Adams, 1854.

6. RISSOIA AUSTRALIS (Tenison-Woods).

Cingulina Australis, Tenison-Woods: Proc. Roy. Soc. Tasmania, 1875
(1876), p. 146; and 1876 (1877), p. 151.

Shell minute, subulate, turreted, thin, shining, transparently white; whorls 7, furnished with elevated rounded spiral keels, with smooth interstices, there being 5 on the last whorl (then 4, 3, etc.), base convex, ornamented with two spiral, rounded, elevated lirae; suture deeply impressed; aperture oblong, entire, outer lip somewhat thickened. Long. 2, lat. .6 mm.

Hab.—Stewart Island (one young specimen collected by A. Hamilton); Tasmania.

Tryon does not mention this species in his monograph. *Rissoa Australis*, G. B. Sby., is a *Rissoina*, and Tenison-Woods' name may, therefore, be retained. There is also a *Rissoa* (*Setia*) *Australis*, Watson, but Tenison-Woods' name has priority.

Sect. CERATIA, H. & A. Adams, 1854.

7. *RISSOIA FUMATA*, n.sp. Fig. I.

Shell minute, subcylindrical, thin, imperforate, dull; whorls 5, flatly convex, closely spirally striated, about ten striæ on the penultimate whorl, first three whorls blackish in colour, the others dark-brown; suture impressed; aperture ovate, lip sharp, slightly thickened, continuous; columella short, subvertical. Operculum unknown. Long. 2, lat. 1 mm.

Hab.—Te Onepoto, near Sumner; a single specimen (H. S.).
Type in my collection.



NEW AUSTRALIAN RISSOIDÆ.

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| I. <i>Rissoia fumata</i> , n.sp. | IV. <i>Rissoia Hamiltoni</i> , n.sp. |
| II. ——— <i>Foveauxiana</i> , n.sp. | V. <i>Barlecia Neozelanica</i> , n.sp. |
| III. ——— <i>lubrica</i> , n.sp. | |

8. *RISSOIA FOVEAUXIANA*, n.sp. Fig. II.

Shell minute, ovate, rimate, white, semi-transparent; whorls 5, convex, with close spiral striæ, about 9 on the penultimate whorl, protoconch smooth; suture deep, not channelled. Aperture ovate, subvertical, peristome sharp, very little thickened, continuous; columella regularly arched, base of peristome slightly expanded. Operculum not seen. Long. 2·5, lat. 1·5 mm.

Hab.—Foveaux Strait, in about 10 fathoms; very rare.
Type in my collection.

Sect. SETIA, H. & A. Adams, 1854.

Subsect. CINGULINA, Monts., 1884.

9. *RISSOIA LUBRICA*, n.sp. Fig. III.

Shell minute, imperforate, pupiform, white, shining; whorls 5, convex, microscopically indistinctly costate; suture impressed, submarginate; aperture semirotund, lip continuous, thickened, expanded at the base. Operculum unknown. Long. 1·75, lat. ·6 mm.

Hab.—Stewart Island; a single specimen.
Type in Canterbury Museum, Christchurch.

Subgen. ALVANIA, Risso, 1826.

Sect. ALVINIA, Monts., 1884.

10. RISSOIA PLICATA, Hutton.

Rissoa plicata, Hutton: Cat. Mar. Moll. New Zealand, 1873, p. 29.*Rissoina plicata*, Hutton: Man. New Zealand Moll., 1880, p. 80.*Eglisia plicata*, Hutton: Proc. Linn. Soc. New South Wales, vol. ix (1885), p. 939; Tryon, Man. Conch., ser. I, vol. ix, p. 86.*Rissoa* (*Alvania*?) *cheilostoma*, Tenison-Woods: Proc. Roy. Soc. Tasmania, 1876 (1877), p. 152.*Rissoia* (*Alvinia*) *cheilostoma*, Tenison-Woods: Tryon, Man. Conch., ser. I, vol. ix, p. 366, pl. lxviii, fig. 91.

Shell imperforate, solid, dull, yellowish, elathrated by longitudinal and spiral ribs, the former becoming obsolete at the periphery, the latter continued and more conspicuous on the base; whorls 7, with deep, lirate, suture; aperture conspicuously bilabiate. Long. 3 mm.

Hab.—Auckland (in Canterbury Museum); Stewart Island (A. Hamilton); Tasmania.

Var. *Lyalliana*, n.var.

Shell cinereous or rufous, occasionally yellowish-white, slightly shorter, less distinctly elathrated, the spiral ribs being more noticeable; the whorls are more shouldered, and the first spiral rib is at a greater distance from the suture.

Hab.—Lyal Bay, near Wellington (A. Hamilton).

Type in my collection.

Genus RISSOINA, D'Orb., 1840.

Sect. RISSOINA, s.s.

11. RISSOINA RUGULOSA (Hutton).

Rissoa rugulosa, Hutton: Cat. Mar. Moll. New Zealand, 1873, p. 28; Proc. Linn. Soc. New South Wales, vol. ix (1885), p. 940; Macleay Memorial Volume (1893), p. 64, pl. viii, fig. 63.

Rissoina rugulosa, Hutton: Man. New Zealand Moll., 1880, p. 80.

Eulima Chathamensis, Hutton: Cat. Mar. Moll. New Zealand, 1873, p. 23; Man. New Zealand Moll., 1880, p. 73.

Shell elongated, conic, yellowish- or greyish-brown, apex white; whorls 7-8, flatly rounded, with longitudinal rounded ribs, 15-16 on the penultimate whorl, and numerous fine spiral striae, most conspicuous on the body-whorl, on which the longitudinal ribs become obsolete on approaching the aperture, and at the base; aperture ovate, outer lip white, mouth purple inside, peristome continuous. Operculum unknown. Long. 7.5, lat. 3 mm.

Hab.—Throughout New Zealand and the Chatham Islands. Specimens from Auckland measure: long. 6–6.5, lat. 2.5–2.75 mm.

Type in the Colonial Museum, Wellington.

On comparison with specimens of *R. variegata*, Angas, from Tasmania, I find *R. rugulosa* is more elongate, only beach-worn specimens are white, and I have seen no examples with brown bands; the whorls are less rounded, the suture less impressed, and the outer lip less expanded. The two species are no doubt nearly allied, but, I think, specifically distinct.

Sect. SCHWARTZIELLA, Nevill, 1884.

12. RISSOINA FASCIATA, A. Adams.

Rissoina fasciata, A. Adams: Proc. Zool. Soc., 1851, p. 264; Hutton, Man. New Zealand Moll., 1880, p. 80.

Rissoina (Oina) fasciata, Angas [error for A. Ad.]: Reeve, Conch. Icon., *Rissoa*, fig. 119.

Rissoina (Schwartziella) fasciata, Angas: Tryon, Man. Conch., ser. I, vol. ix, p. 380, pl. lxviii, fig. 7.

Shell fulvous, with a peripheral chestnut band, visible on the upper whorls at the suture, and numerous flexuous ribs, about 20 on the penultimate whorl; whorls 7, slopingly convex; outer lip thick, columella short, almost truncate. Long. 6 mm.

Hab.—New Zealand (Angas, Sowerby); Auckland (C. Spencer); Sydney (Strange).

Two specimens, collected by Mr. C. Spencer, of Auckland, are in the Canterbury Museum.

Subgen. EATONIELLA, Dall, 1876.

13. RISSOINA OLIVACEA (Hutton).

Dardania olivacea, Hutton: Trans. New Zealand Inst., vol. xiv, 1882, p. 147, pl. i, fig. K, 1–4.

Rissoina (Eatoniella) olivacea, Hutton: Proc. Linn. Soc. New South Wales, vol. ix (1885), p. 940.

Jeffreysia (Dardania) olivacea, Hutton: Tryon, Man. Conch., ser. I, vol. ix, p. 397, pl. lx, fig. 95.

Shell ovate, smooth, dark-brown; whorls 4, convex; lip not continuous. Operculum ovate, subspiral, with a long process from below the nucleus. Long. 2, lat. 1.5 mm.

Hab.—Lyttelton, Auckland, Stewart Island.

Type in the Canterbury Museum, Christchurch.

Genus BARLEEIA, Clark, 1855.

14. BARLEEIA IMPOLITA (Hutton).

Rissoa impolita, Hutton: Cat. Mar. Moll. New Zealand, 1873, p. 29; Proc. Linn. Soc. New South Wales, vol. ix (1885), p. 941.

Barleeia impolita, Hutton: Man. New Zealand Moll., 1880, p. 81.

Shell conoidal, white, not polished; whorls 4, flattened, finely spirally striated; suture small; aperture ovate. Operculum unknown. Long. 2·5, lat. 1·5 mm.

Hab.—Stewart Island.

Type in the Colonial Museum, Wellington.

15. BARLEEIA ROSEA (Hutton).

Rissoa rosea, Hutton: Cat. Mar. Moll. New Zealand, 1873, p. 29; Proc. Linn. Soc. New South Wales, vol. ix (1885), p. 941.

Barleeia rosea, Hutton: Man. New Zealand Moll., 1880, p. 81; Tryon, Man. Conch., ser. i, vol. ix, p. 393, pl. lxxi, fig. 6.

Shell ovate, pink, polished, smooth; whorls 4, rather flat; aperture round; lip not continuous. Operculum unknown. Long. 1·75, lat. 1·25 mm.

Hab.—Stewart Island.

Type in the Colonial Museum, Wellington.

16. BARLEEIA NEOZELANICA, n.sp. Fig. V. (p. 5.)

Shell minute, ovate-conical, imperforate, subpellucid, white, thin, smooth, shining; whorls 5-5½, flatly convex, suture impressed, channelled, a faint indication of the sutural channel being sometimes seen continued on the periphery of the body-whorl, a few spiral striæ sometimes surround the umbilical area; aperture vertical, oval, lip sharp, rounded at the base, slightly thickened, columella concave, united to the outer lip by a thin callosity. Young specimens are rimate. Operculum unknown. Long. 2, lat. 1·5 mm.

Hab.—Stewart Island (Mr. A. Hamilton).

Type in my collection.

NOTE.

Rissoa flammulata, Hutton (Journ. de Conch., vol. xxvi, 1878, p. 28), has been transferred by Mr. Pilsbry to the genus *Phasianella*, and the specific name being preoccupied in that genus, he has changed it to *Huttoni* (Man. Conch., ser. i, vol. x, p. 174).

Rissoa limbata, Hutton (New Zealand Journ. Sci., vol. i, 1883, p. 477), I also class under *Phasianella*, to which genus it undoubtedly belongs. I have examined the operculum of one specimen and found it to be white and calcareous.